

Date: Thursday, 22/05/2008 1:39:04 PM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SINGLE MIRROR ASSEMBLY
Job Number : 39399	
Estimate Number : 12277	
P.O. Number :	Part Number : D206558041
This Issue : 22/05/2008 S.O. No. :	Drawing Number : IIN206-558 / D2065
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : C / B1
Previous Run : 39398	Material :
Written By :	Due Date : 30/05/2008 Qty: 8 Um: Each
Checked & Approved By : <u>JUD 08.5.22</u>	
Comment : Est. F 02.09.19 Re-format; Incorporated D2065 KJ Est Rev:G 08-05-14 now @ chg006/ add D3778-1 per ECN1171 DD verified:	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D206-558-041 CHG006

50866/23 08.5.23 JUD

2.0	M304TR0500W035	304 RD Tube .500 x .035W
-----	----------------	--------------------------

**Comment:** Qty.: 1.7500 f(s)/Unit Total: 5.2501 f(s)

304 RD Tube .500 x .035W

304/316 SS Seamless Tube (Ref QSI 017 4.1.1.2) as per Dwg D2065 using punch Jig DT8012

(M04TR0.500W035)

Identify as D2065.

Note: 1 end only

Batch M 107146 ③ 8/5 08/05/23 ⑧
M 107790 ⑤

3.0	BRAKE NC	NC BRAKE
-----	----------	----------

**Comment:** NC BRAKE

Punch 1/2" OD x .035 " Wall AISI

SRB 08/05/23 ⑧

4.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------

**Comment:** SMALL & MEDIUM FAB RESOURCE 1

Cut to length as per Dwg D2065

Bend as per Dwg D2065 and template D2065T1

Flatten the end on Hydraulic press using Dt 8545

Drill 00.188" holes as per Dwg D2065 and template D2065 T1 and using Dt 8768 Drill Jig.

Deburr.

FF 08-05-26

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Seq. #:

Machine Or Operation:

Description :

5.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

508/05/26 (88)

6.0

POWDER COATING

POWDER COATING



M 10 5642



(8X)

Comment: POWDER COATING

Powder Coat Black Sandtex (Ref: 4.3.5.7) as per QSI 005 4.3

START TIME:

2:10

OVEN TEMPERATURE:

320

FINISH TIME:

2:50

M-1 08/05/26

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SR 08-05-26

(8)

8.0

D201101

6" Mirror



Comment: Qty.: 1.0000 Each(s)/Unit Total: 3.0000 Each(s)

Mirror 6"

Pick:

Qty Part Number

Description

Batch

1 D2011-101

Mirror

38288

50

9.0

D2052

Mounting Bracket



Comment: Qty.: 2.0000 Each(s)/Unit Total: 6.0000 Each(s)

Bracket

Pick:

Qty Part Number

Description

Batch

2 D2052

Bracket

17500

50

10.0

D2054

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 6.0000 Each(s)

Bushing - Delrin

Pick:

Qty Part Number

Description

Batch

2 D2054

Bushing

31219

8/1/26

56

W/O:		WORK ORDER CHANGES					
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Job Number: 39399

Part Number: D206558041

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

D2055

Clamp



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Clamp

Pick:

Qty Part Number Description Batch
1 D2055 Clamp

34365

54

12.0

D2056

Bell Crank



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Bell Crank Assembly

Pick:

Qty Part Number Description Batch
1 D2056 Bellcrank

37629

37727

54

13.0

D2057

Plug



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Plug

Pick:

Qty Part Number Description Batch
1 D2057 Plug

34366

54

14.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 12.0000 Each(s)

Washer

Pick:

Qty Part Number Description Batch
4 AN960JD10 Washer

101799

108077

54

15.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Pick:

Qty Part Number Description Batch
2 MS21042L3 Nut
or MS21042-3

107644

8/5/06

Sp

W/O:		WORK ORDER CHANGES					
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Job Number: 39399

Part Number: D206558041

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

MS27039118

Screw



(8x)

Comment: Qty.: 2.0000 Each(s)/Unit Total: 6.0000 Each(s)

Screw

Pick:

Qty Part Number

Description

Batch

2 MS27039-1-18 Screw

106112

8/5/24

50

17.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per Dwg D206-558

EP 08/06/02 (8)

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/06/02 (x8)

19.0

D2053

Mounting Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 3.0000 Each(s)

Bracket

Pick: Packing Kit

Qty Part Number

Description

Batch

1 D2053

Bracket

35362

38531

SP

20.0

D37781

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 3.0000 Each(s)

Bracket

batch:

39293

SP

21.0

D2067

Connector



(8x)

Comment: Qty.: 1.0000 Each(s)/Unit Total: 3.0000 Each(s)

Connector

Pick: Packing Kit

Qty Part Number

Description

Batch

1 D2067

Connector

37483

8/6/2

SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 39399

Part Number: D206558041

Job Number:



Seq. #: Machine Or Operation: Description :

22.0 D2071 Cable Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Cable Assembly

Pick: Packing Kit

Qty Part Number Description Batch

1 D2071 Cable 38289

SP

23.0 AN34A Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 12.0000 Each(s)

Bolt

Pick: Packing Kit

Qty Part Number Description Batch

4 AN3-4A Bolt 103641

SP

24.0 AN5261032R9 Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 12.0000 Each(s)

Screw

Pick: Packing Kit

Qty Part Number Description Batch

4 AN526-1032R9 Screw 101189
or AN526C1032R9

SP

25.0 MS21042L3 Nut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Nut

Batch: 107644

SP

26.0 AN960JD10L Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 12.0000 Each(s)

Washer

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10L Washer 104885

8/6/2

SP

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 39399

Part Number: D206558041

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

MS21919DG5

Clamp



Comment: Qty.: 2.0000 Each(s)/Unit Total : 6.0000 Each(s)

Clamp

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21919DG5 Clamp

or MS21919WDG5

~~1505~~ 107591

50

28.0

MS354899

Grommet



Comment: Qty.: 1.0000 Each(s)/Unit Total : 3.0000 Each(s)

Grommet

Pick: Packing Kit

Qty Part Number Description Batch

1 MS35489-9 Grommet

9619

8/6/2

50

29.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

5 0806062848

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-558-041

Location:

PPP Rev:

4

8/6/3

50

31.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/06/04

Job Completion



MF 08-06-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

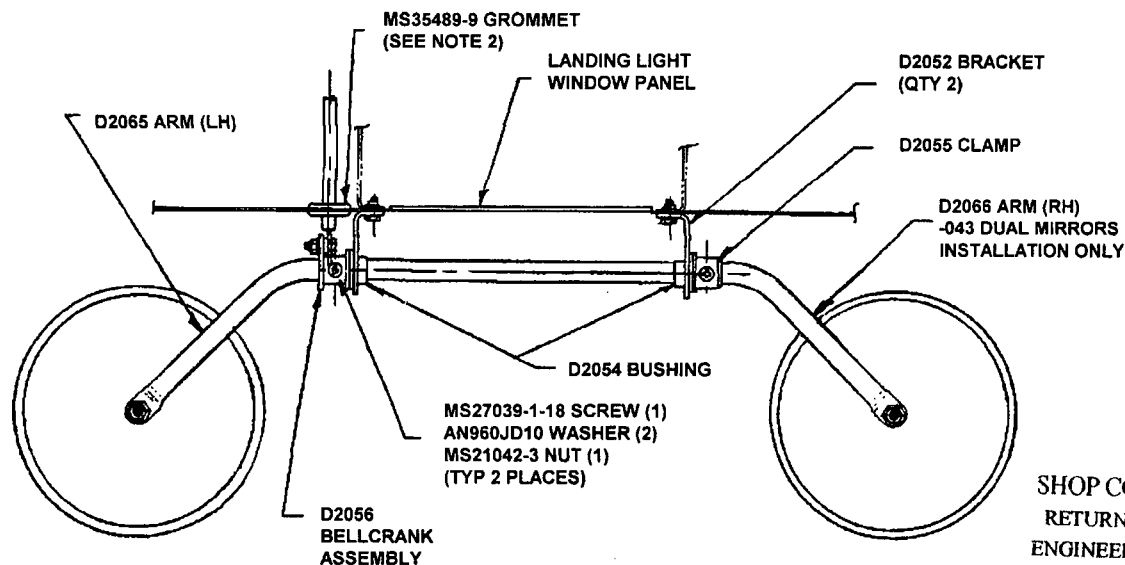
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

3.0 CARGO MIRROR INSTALLATION

Install the Cargo Mirror as follows:

1. Install D206-558-041/-043 cargo mirror assembly using AN3-4A bolts and AN960JD10L washers. Pickup existing anchor nuts in 4 places.
2. Install D2067 connector onto D2056 bellcrank assembly to locate hole for MS35489-9 grommet. With the mirror in the deployed position, mark and drill $\varnothing 0.125$ " (3.2mm) hole in landing light window panel where the grommet should be located. Open pilot hole to $\varnothing 0.563$ " (14.3mm). Install grommet.
3. Install D2053 bracket using AN526-1032R9 screws. Pickup on existing anchor nuts.
4. Position D2071 cable as shown. Install MS21919DG5 clamps using AN526-1032R9 screws where required. Pickup existing rivnuts or anchor nuts if available.
5. Install D2071 control cable using D2067 connector. Connector should rotate freely in bellcrank when MS21042-3 nut is torqued and cable clamped



**Figure 2: – View A: Looking Aft.
(D206-558-043 Mirror Shown)**

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QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

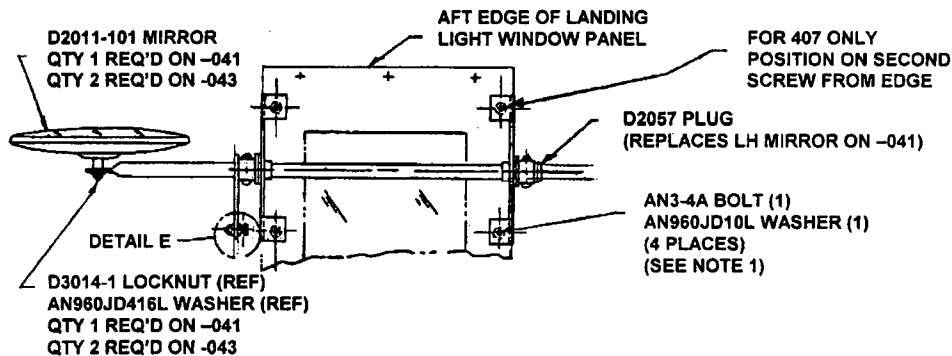


Figure 3: - View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

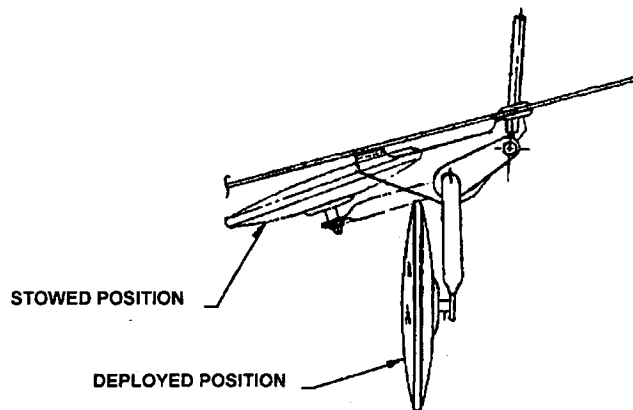


Figure 4: - Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

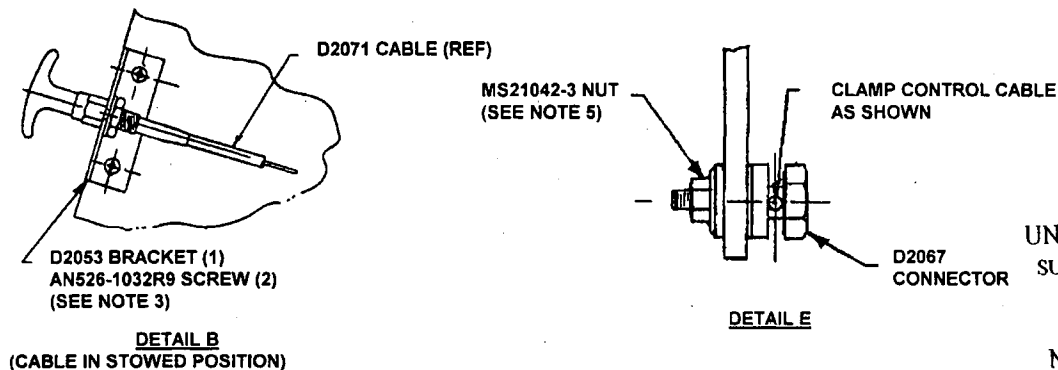


Figure 5: - Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

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4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041 Bell 206A/B/L/L1/L3/L4 Bell 407	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D206-558-043 Bell 206A/B/L/L1/L3/L4 Bell 407	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg

5.0 WEIGHT AND BALANCE

Qty -041	Qty -043	Part Number	Description
X		D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X	D206-558-043	DUAL CARGO MIRROR ASSEMBLY
1	2	D3014-1	* LOCKNUT
1	1	D2071	CABLE ASSEMBLY
2	2	D2054	BUSHING
1	1	D2067	CONNECTOR
	1	D2066	ARM
1		D2065	ARM
1		D2057	PLUG
1	1	D2056	BELLCRANK ASSEMBLY
1	1	D2055	CLAMP
1	1	D2053	BRACKET
2	2	D2052	BRACKET
1	2	D2011-101	MIRROR ASSEMBLY
4	4	AN3-4A	BOLT
4	4	AN526-1032R9	SCREW
1	2	AN960JD416L	* WASHER
4	4	AN960JD10	WASHER
6	6	AN960JD10L	WASHER
3	3	MS21042-3	NUT (or MS21042L3)
2	2	MS21919DG5	CLAMP
2	2	MS27039-1-18	SCREW
1	1	MS35489-9	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

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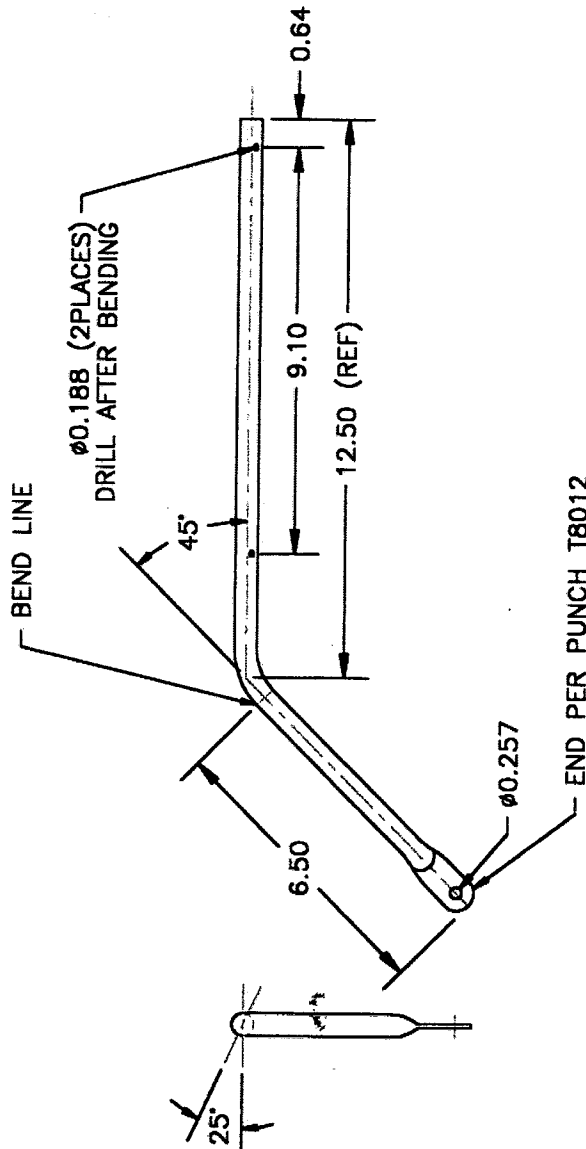
NOTE: Date & initial all entries

DART



RELEASED
96/11/14 BW

DESIGN	DRAWN BY	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
B WILLIAMS	B WILLIAMS	DRAWING NO.	REV. B
CHECKED	APPROVED	D2065	SHEET 1 OF 1
DATE		TITLE	SCALE
92.03.12		ARM	1:4
B	96.02.06	RE-DESIGN	
BI	02.03.25	ADD FINISH	



D2065 CUT LENGTH 19.5

MATERIAL: 304/316 SS 1/2 OD X 0.035 WALL
FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER
DART Q31 Q35 4.3

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